In the Claims

The following listing of claims replaces all prior listings:

1.   A method for regulating access to nonvolatile digital storage contained in a device executing instructions in a Turing-complete interpreter, said method comprising:

(a)   receiving a request from said instructions being executed, wherein said request specifies :

(i) a portion of said storage for which access is requested, and

(ii) a plurality of additional executable instructions;

(b) applying a cryptographic hash function to said additional executable instructions to obtain a hash value;

(c) authenticating said hash value; and

(d) provided that said authentication is successful, enabling access by said instructions being executed to said requested portion of said storage while executing said additional executable instructions.

2.   The method of claim 1 wherein said step of authenticating comprises comparing said hash value with a hash value stored in said nonvolatile storage.

3.   The method of claim 1 wherein said step of authenticating comprises verifying a digital signature provided by said instructions being executed.

4.   The method of claim 1 wherein said request includes a pointer to said

additional executable instructions in memory accessible by said instructions being executed

and contained in said device.

5.   A digital optical disc medium containing encrypted audiovisual content for

playback on any of a plurality of device architectures, said digital optical disc medium

comprising program logic configured to:

(a) identify at least one characteristic of a device executing said program logic;

(b) use said at least one characteristic to determine which, if any, of a plurality of security

weaknesses are present in said executing device;

(c) when said determination indicates a suspected weakness,

          (i) select at least one of a plurality of software countermeasures, wherein said selected

countermeasure corresponds to said suspected weakness and is compatible with said

executing device;

          (ii) mitigate said suspected weakness by directing said executing device to invoke said

selected countermeasure; and

          (iii) decode said encrypted audiovisual content, wherein said decoding includes a

result produced by successful operation of said countermeasure logic; and

(d) when said determination does not indicate a suspected weakness, decode said audiovisual

content using at least one decryption key derived using at least one cryptographic key

associated with said executing device.

6.   The digital optical disc medium of claim 5 wherein said program logic is

configured to execute in an interpreter common to said plurality of device architectures, and

at least a portion of said selected countermeasure is configured to be executed directly as native code on a microprocessor associated with said executing device.

7. The digital optical disc medium of claim 5 wherein said digital optical disc medium further includes a digital signature authenticating said native code portion.

8. An automated method for enabling a playback device containing a nonvolatile memory to determine whether permission to use digital optical disc media has been revoked, said method comprising:

(a) reading a media identifier from a digital optical disc medium;

(b) verifying that said media identifier is not represented in a revocation list stored in nonvolatile memory;

(c) storing said media identifier in a playback history contained in said nonvolatile memory;

(d) reading a list of revoked media identifiers from said digital optical disc media;

(e) noting any media identifier that is represented in said playback history and is also represented on said read list of revoked media identifiers; and

(f) adding any said noted media identifier to said revocation list contained in said nonvolatile memory.

9. The method of claim 8 wherein playback of encrypted audiovisual content contained on said digital optical disc medium is prevented when said verifying step determines that the media identifier is represented in said revocation list.

10. The method of claim 8 wherein playback of encrypted audiovisual content contained on said digital optical disc medium is performed at reduced quality when said verifying step determines that the media identifier is represented in said revocation list.

11. An automated method for determining whether to allow a portion of software stored in a computer-readable memory to access a portion of a nonvolatile memory, the method comprising:

(a) receiving a reference to said portion of software;

(b) computing a cryptographic hash of said software portion;

(c) comparing said computed cryptographic hash with a value stored in said nonvolatile memory,

(d) when said computed cryptographic hash matches said stored value, allowing said software portion to access said nonvolatile memory portion; and

(e) when said computed cryptographic hash does not match said stored value, not allowing said software portion to access said nonvolatile memory.